

Application Ser. No. 10/719,811
Attorney Docket No. 4740-252
Client Ref. No. P18784-US1

REMARKS

Claims 1-48 are pending. All claims are under final rejection, including independent claims 1, 10, 19, and 34.

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Claims 1-18 are not obvious over Black and Soliman

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Independent claims 1 and 10, and their respective dependent claims 2-9 and 11-18 are rejected as obvious over Black (US 6,397,070) in view of Soliman (US 5,859,838). Claims 1 and 10 include limitations directed to transmitting a desired target mobile transmit power, which is estimated based on reverse link loading. In plain error, the examiner states that Black teaches transmitting a target power to at least one mobile station. The examiner refers to Black's title, Abstract, and various other sections of Black as supporting that assertion. The evidence speaks for itself; none of the cited sections of Black, nor any other sections of Black, teach transmitting the claimed desired target mobile transmit power. Soliman does not provide this missing limitation and the rejection of claims 1-18 fails as a matter of law. Put simply, the examiner will lose this argument on appeal.

In more detail, the originally filed application explains one embodiment of the claimed desired target mobile transmit power beginning on p. 10, line 22, where it states:

In one exemplary embodiment of the invention, equalization of mobile station transmit powers is achieved by transmitting a target transmit power $P_T(n)$ from the RBS 36 to mobile stations 100 at connection setup or following a handoff. The target transmit power $P_T(n)$ is based on a desired target load at the RBS 36 and represents the transmit power that should be maintained by each mobile station 100 transmitting on the reverse link channel. The RBS 36 begins with an initial estimate of $P_T(n) = 0$ at startup. Periodically (e.g., once per frame), the RBS 36 estimates the reverse link load and broadcasts a quantized load indication to mobile stations 100 transmitting on the reverse link channel. The load indications, denoted $b(n)$, may be transmitted to the mobile stations 100 over a common control channel. The mobile stations 100 adjust their data transmission rates as will be described in greater detail below. The RBS 36 additionally updates its estimate of the target transmit power $P_T(n)$ based on the current estimated load $L(n)$. If the estimated load $L(n)$ at period n exceeds a

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maximum load L_{MAX} , the base station reduces the target transmit power $P_T(n)$.
Conversely, if the estimated load $L(n)$ is lower than a minimum load L_{MIN} , the
RBS 36 increases the target transmit power $P_T(n)$.

(Emphasis added.)

The above passage makes clear, as does the plain language of the claims, that the claimed desired target mobile transmit power is a power target transmitted to at least one mobile station, which is sent in addition to load indication transmission. At most, Black teaches the transmission of a signal that indicates that a base station has reached its reverse link capacity—see col. 5, lines 60+ of Black. By no stretch of language or logic can that be argued as the claimed transmission of a desired target mobile transmit power.

Again, Black utterly fails to teach or suggest that explicitly claimed limitation, and the combination of Black with Soliman therefore fails to teach or suggest every limitation of independent claims 1 and 10. As a matter of law, the examiner has failed to carry the burden of making out a *prima facie* case for obviousness.

As another fundamental error, the examiner states Soliman teaches the explicit limitation in claims 1 and 10 of transmitting periodic load indications to mobile stations, which are indicative of reverse link loading. Soliman does not teach or suggest that limitation and it will be simple to demonstrate on appeal that the disclosure of Soliman does not support the examiner's rejection statements.

For example, the examiner states that the Abstract and col. 7, lines 14-65, of Soliman teach "transmitting a periodic load indication indicative of the reverse link load on a common control channel to one or more mobile stations." In full, the Abstract of Soliman states:

A system and method for monitoring and managing the loading conditions in a CDMA wireless communication system. The system comprises a load monitoring device such as a CDMA mobile station connected to a data logging and processing device such as a diagnostic monitor. The monitoring device is placed within the service area of a base station. The monitoring device periodically initiates a call, is assigned to a traffic channel normally, and logs a power control

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parameter such as mobile station transmit power or the number of closed-loop power control commands received per unit time. From this information, the load monitoring device can infer the real-time traffic loading conditions of the base station. If the loading of the system exceeds a predetermined threshold, an alarm may be sent to the system management center in order to take some action to limit additional loading on the base station.

(Emphasis added.)

Self-evidently, nothing in the Abstract says a word about transmitting periodic reverse load indications to mobile stations. Soliman's load monitoring device does periodically initiate a telephone call to a base station, so that it can determine loading conditions, but such calls do not generate reverse link loading indicators that are transmitted to mobile stations, but rather are used to trigger alarms for a system management center. Column 7 of Soliman, also cited by the examiner, is similarly lacking any teachings relevant to the claimed limitation.

Indeed, the record established by the Patent Office in this prosecution utterly lacks any evidence that Soliman provides the teachings it is claimed to provide. The plain language of Soliman contradicts the rejection arguments, and for this further reason the rejection of claims 1-18 falls as a matter of law.

Claims 19, 20, and 34-35 are not obvious over Black and Attar

The examiner rejects claims 19, 20, and 34-35 as obvious over Black in combination with Attar (US Pub. 2004/0202136). Claim 19 is an independent mobile station method claim and claim 34 is an independent mobile station apparatus claim. Claim 19 includes the limitations of "determining a rate change probability as a function of a current transmit power of mobile station," and "selectively changing the data transmission rate of the mobile station based on the rate change probability." Claim 34 includes similar limitations cast in apparatus language.

The rejection arguments given by the examiner on p. 7 of the Final Office Action are incomprehensible and do not provide Applicant with a fair opportunity to analyze the examiner's interpretation of the rejections claims, nor the alleged teachings of the references. For example, the examiner states that Black teaches "determining a rate change probability as a function of a

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current transmit power of a mobile station (C5, L56-67, C6, L1-25 teach adjust [sic] the data rate in response to signal [sic] which means as [sic] determining a rate change." Applicant respectfully requests that the examiner provide a meaningful statement of record in this prosecution, explaining what is meant by this assertion.

Further, for the record, none of the sections referred to in Black by the examiner have anything to do with determining a rate change probability. There is no language in Black even remotely arguable as supporting the claimed limitation and the rejection arguments against these claims will fail on appeal for this reason alone.

As further demonstration that the rejection arguments are unsupported by the references, the explanation given by the examiner on p. 7 of the Final Office Action states that Black teaches determining a rate change probability as a function of a mobile station's current transmit power. Yet the examiner also states that Black is silent on "selectively changing the data transmission rate of the mobile station based on the rate change probability." Applicant submits that by definition, if Black taught a mobile station that determines a rate change probability based on its current transmit power, it necessarily would also teach that the mobile station selectively changes its transmit data rate as a function of that probability. As is self-evident from Black's plain language, Black never mentions or suggests a data rate change probability being computed at a mobile station.

Claims 21-48 are not obvious over Black in view of Soliman in further view of Attar

For at least the reasons given above with regard to claims 19 and 34, the rejection of these claims as obvious over the three-way combination of Black, Soliman, and Attar fails as a matter of law.

Examiner's Response to Applicant's Prior Arguments

Applicant attempted in its last response to highlight to the examiner the utter lack of textual support in Black and Soliman for any of the rejection arguments advanced by the

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examiner in the last Office Action, which are now made final. Applicant is frustrated that the examiner's "Response to Arguments" in this Final Office Action is very difficult to understand. However, it does seem that the examiner's response suggests overbroad, unreasonable, and legally impermissible claim constructions. For example, on p. 3, the examiner states:

[W]herein the base station couple [sic] to load monitoring device 102 which transmitting [sic] periodic load indication of the reverse link load to mobile station [sic]. Therefore, examiner interpreted 'estimating a reverse link load; transmitting the target transmit power to at least one mobile station' and 'transmitting a periodic load indication indicative of the reverse link load on a common control channel to one or more mobile stations' as broadest reasonable interpretation and it is proper.

That statement is in error inasmuch as Soliman's load monitoring device unequivocally does not transmit period reverse link load indications to a mobile station.

More critically, it simply is not understandable as a statement of claim language construction. That is, the examiner's statement provides no reasonable basis in the prosecution record for the Applicant to understand the construction being given to the claim limitations at issue.

Closing

For the forgoing reasons, it is respectfully urged that the present application is in condition for allowance and notice to such effect is respectfully requested.

Respectfully submitted,

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